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“Filling gaps and removing traps
for sustainable resource management”

A Customized Assessment Tool to Differentiate Safety and Hygiene Practices in Emerging Dairy Chains

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Abstract

In emerging dairy chains, inconsistent product quality and safety issues are prevalent. The need for continuous improvement in practices to meet rapidly growing demands for dairy products quality and safety is imperative. However, existing assessment tools are often based on advanced food safety management systems and standards, which present an inaccurate picture of practice performance in emerging dairy chains. This study presents the development of a customised tool to assess and differentiate levels of safety and hygiene practices in emerging dairy chains. The tool consists of indicators and corresponding grids to assess and differentiate the levels of safety and hygiene practices at the farm, during transportation, milk bulking, and retail points crucial for microbiological and chemical (i.e. aflatoxin) safety. The assessment tool was piloted in Tanzania, as an example of an emerging dairy chain, using interviews, farm visits and audio-visual assisted observations. Thirty-eight smallholder farmers and three large-scale farms were interviewed and their farm practices observed. Overall, the customized assessment tool was able to differentiate accurately safety and hygiene practices of the farmers. The obtained profiles of farmers' safety and hygiene practices provided a basis for stepwise improvement of practices of individual farmers in emerging dairy chains. Moreover, the profiles provided a starting point for development of training programs customised to the knowledge and skills needs of groups of farmers with similar profiles. The tool is useful for a comprehensive baseline and post-intervention assessment to give evidence of the impact on farmers' safety and hygiene practices achieved after an intervention.

Keywords: Dairy chain actors, milk, milk safety, on-farm practices